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| EXAMINER | |
|---|---|
| VIZVARY, GERALD C | |
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

| Office Action Summary | Application No. | Applicant(s) | |
|---|---|---|---|
| | 10/772,103 | DERETZ, CYRIL | |
| | Examiner | Art Unit | |
| | GERALD C. VIZVARY | 3696 | |

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☐ Responsive to communication(s) filed on *24 April 2009*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) *1-4,6-12 and 14-20* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-4,6-12 and 14-20* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

## DETAILED ACTION

### *Request for Continued Examination*

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 4/24/2009 has been entered.

### *Claim Rejections - 35 USC §101*

2. 35 U.S.C. §101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1-8 & 17-20 are rejected under 35 U.S.C. §101 because the claimed invention is directed to non-statutory subject matter.

Based on Supreme Court precedent (*Diamond v. Diehr*, 450 U.S. 175, 184 (1981); *Parker v. Flook*, 437 U.S. 584, 588 n.9 (1978); *Gottschalk v. Benson*, 409 U.S. 63, 70 (1972); *Cochrane v. Deener*, 94 U.S. 780, 787-88 (1876)) and recent Federal Circuit decisions, §101 process must (1) be tied to another statutory class (such as a particular apparatus) or (2) transform underlying subject matter (such as an article or materials) to

a different state or thing (the Supreme Court recognized that this test is not necessarily fixed or permanent and may evolve with technological advances. *Gottschalk v. Benson*, 409 U.S. 63, 71 (1972)).

If neither of these requirements is met by the claim(s), the method is not a patent eligible process under 35 U.S.C. §101.

In this particular case, regarding the first test, in performing the steps of the claimed subject matter, there is no requirement that a machine be used, thus the claims are not considered sufficiently tied to another statutory class. Regarding the second test, since the claimed subject matter may be performed using only human intelligence, the steps do not sufficiently transform the underlying subject matter to be statutory.

### ***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1 & 9 are rejected under 35 USC § 112 2nd paragraph. The terms "similarity of behavior", “intermediate performance”, “being related to” & “successive intermediate dates” in claims 1 & 9 are unclear and render the claims indefinite. The terms "similarity", “intermediate” & “related to” are not defined by the claim, and the specification does not provide a standard for ascertaining the meaning and one of

ordinary skill in the art would not be reasonably apprised of the scope of the invention or if at the time the application was filed, had possession of the claimed invention.

Claims 8 & 16 are rejected under 35 USC § 112 2nd paragraph. The term "consensus mechanism" in claims 8 & 16 is unclear and renders the claims indefinite. The term "consensus mechanism" is not defined by the claim, and the specification does not provide a standard for ascertaining the meaning and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention or if at the time the application was filed, had possession of the claimed invention.

Claims 18 is rejected under 35 USC § 112 2nd paragraph. The term "implied volatility" in claims 18 is unclear and renders the claim indefinite. The term "implied" is not defined by the claim, and the specification does not provide a standard for ascertaining the meaning and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention or if at the time the application was filed, had possession of the claimed invention.

Claims 2-8, 10-12, 14, 15, and 17-20 are also rejected for their dependency from a rejected base claim.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

> invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 1-4, 6-12 & 14-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Olsen US 2002/0123951 A1 in view of Lange 6,321,212.

As per claim 1 (Currently amended) Olsen US 2002/0123951 A1 discloses a method for correlation risk hedging comprising:

selecting at least two underlying assets; and providing a product having a payoff value wherein the payoff value is a function of the similarity of the behavior of the intermediate performances of the at least two underlying assets, each intermediate performance being related to the time period between two successive intermediate dates, ("The present invention determines a portfolio from past values of underlyings and from views about the future values of underlyings." Olsen US 2002/0123951 A1 ¶ [0004]); and ("Dynamic hedging with trading models is an automatic consequence of the system--since the portfolio can have a position in the US Dollar and a trading model against the US Dollar as two separate assets with different weights in the portfolio." Olsen US 2002/0123951 A1 ¶ [0004])

Olsen US 2002/0123951 A1 fails to explicitly teach that <u>each underlying asset is a foreign-exchange rate, an index level, an equity indices or an interest rate.</u>

Lange 6,321,212 teaches "The distribution will typically be defined for events of economic interest for investment by traders having the expectation of a return or a reduction of risk ("hedging"). For example, the distribution can be based upon the

values of stocks, bonds, futures, and foreign exchange rates." Lange 6,321,212 col. 23 lines 44-49)"

It would have been obvious to one of ordinary skill in the art at the time of the invention to include using stocks, bonds, futures, and foreign exchange rates. as taught by Lange 6,321,212 in the system of Olsen US 2002/0123951 A1, since the claimed invention is merely a combination of old elements, and in the combination each element merely would have performed the same function as it did separately, and one of ordinary skill in the art would have recognized that the results of the combination were predictable

As per claim 2 (Original) Olsen US 2002/0123951 A1 in view of Lange 6,321,212 teaches a method according to claim 1.

Olsen US 2002/0123951 A1 fails to explicitly teach that the payoff value is value negotiated for a product traded on an over the counter (OTC) market.

Lange 6,321,212 teaches "Derivatives are traded on exchanges, such as the option and futures contracts traded on the Chicago Board of Trade (CBOT), as well as off-exchange or over-the-counter (OTC) between two or more derivative counterparties." (Lange 6,321,212 col. 2 lines 35-38)"

It would have been obvious to one of ordinary skill in the art at the time of the invention to include trading on an over the counter (OTC) market. as taught by Lange 6,321,212 in the system of Olsen US 2002/0123951 A1, since the claimed invention is merely a combination of old elements, and in the combination each element merely would have

performed the same function as it did separately, and one of ordinary skill in the art would have recognized that the results of the combination were predictable

As per claim 3 (Original) Olsen US 2002/0123951 A1 in view of Lange 6,321,212 teaches a method according to claim 2.

Olsen US 2002/0123951 A1 fails to explicitly teach that said at least one product is quoted on a futures market.

Lange 6,321,212 teaches "This is how derivatives traders currently are able to hedge options, futures, and other derivatives trades" (Lange 6,321,212 col. 18 lines 14-15)

It would have been obvious to one of ordinary skill in the art at the time of the invention to include quotation on a futures market. as taught by Lange 6,321,212 in the system of Olsen US 2002/0123951 A1, since the claimed invention is merely a combination of old elements, and in the combination each element merely would have performed the same function as it did separately, and one of ordinary skill in the art would have recognized that the results of the combination were predictable

As per claim 4 (Original) Olsen US 2002/0123951 A1 in view of Lange 6,321,212 teaches a method according to claim 1.

Olsen US 2002/0123951 further discloses that said product comprises an expiry date and wherein the payoff at the expiry date is determined by:

$$p = 100 * \left[ 1 + \frac{\sum_{i=1}^{n} p_1(i) p_2(i)}{\sqrt{\sum_{i=1}^{n} [p_1(i)]^2} \cdot \sqrt{\sum_{i=1}^{n} [p_2(i)]^2}} \right]$$

wherein n+1 is the number of said intermediate dates, the intermediate date 0 being said initiation date, $p_1(i)$ is the performance between intermediate dates i-1 and i of said first underlying asset and $p_2(i)$ is the performance between intermediate dates i-1 and i of said second underlying asset. ("In addition to a volatility model, the user can associate a model for correlation with each underlying. The available models are the same as the volatility models, i.e. historical, RMA, EMA and GARCH(1, 1). Now, however, these models are not used to define the volatility for the underlyings. Rather, they are combined pairwise to give formulas for the correlations between the underlyings. Olsen US 2002/0123951 A1 ¶ [0231]) and ("Accordingly, the correlation can be defined by

$$Cor_1 = \frac{\sum_{i=1}^{N} w_{1,i} w_{2,i} Y_{1,i} Y_{2,i}}{\left( \sum_{i=1}^{N} |w_{1,i} Y_{1,i}|^2 \right)^{1/2} \left( \sum_{i=1}^{N} |w_{2,i} Y_{2,i}|^2 \right)^{1/2}},$$

Olsen US 2002/0123951 A1 ¶ [0236])

As per claim 6, Examiner notes that the recitation "intermediate performances are monthly, weekly or daily performances" has not been given patentable weight because the intended use is not functionally related to the method steps. Thus, this nonfunctional descriptive material will not distinguish the claimed invention from the prior art in terms of patentability, see *In re Gulack*, 703 F. 2d 1381, 1385, 217 USPQ 401, 404 (Fed. Cir. 1983); *In re Lowry*, 32 F. 3d 1579, 32 USPQ 2d 1031 (Fed. Cir. 1994).

As per claim 7 (Original) Olsen US 2002/0123951 A1 in view of Lange 6,321,212 teaches a method according to claim 1.

Olsen US 2002/0123951 further discloses that the product value is determined by a Monte Carlo simulation. ("Simulation Model One embodiment of the present invention solves the portfolio re-allocation problem via Monte-Carlo simulation, which involves the construction of multivariate correlated paths into the future for each underlying time series." Olsen US 2002/0123951 A1 ¶ [0022])

As per claim 8 (Original) Olsen US 2002/0123951 A1 in view of Lange 6,321,212 teaches a method according to claim 1.

Olsen US 2002/0123951 A1 fails to explicitly teach that the product value is determined by a consensus mechanism.

Lange 6,321,212 teaches "Many data services, such as IBES and FirstCall, currently publish estimates by analysts and a consensus estimate in advance of quarterly earnings announcements." (Lange 6,321,212 col. 51 lines 25-27)

It would have been obvious to one of ordinary skill in the art at the time of the invention to include consensus estimates as taught by Lange 6,321,212 in the system of Olsen US 2002/0123951 A1, since the claimed invention is merely a combination of old elements, and in the combination each element merely would have performed the same function as it did separately, and one of ordinary skill in the art would have recognized that the results of the combination were predictable

As per claim 9 (Currently amended) Olsen US 2002/0123951 A1 discloses a system for correlation risk hedging comprising:

a computer processing unit; memory device couple to said computer processing unit; and

computer-readable instructions stored in said memory, ("A programmed computer for determining a portfolio, comprising at least one memory having at least one region storing computer executable program code and at least one processor for executing the program code stored in said memory" Olsen US 2002/0123951 A1 claim 36])

said computer-readable instructions capable of carrying out the functions of:

selecting at least two underlying assets, at least one underlying asset having an associated risk to be hedged ("The present invention determines a portfolio from past values of underlyings and from views about the future values of underlyings." Olsen US

2002/0123951 A1 ¶ [0004]); and ("Dynamic hedging with trading models is an automatic consequence of the system--since the portfolio can have a position in the US Dollar and a trading model against the US Dollar as two separate assets with different weights in the portfolio." Olsen US 2002/0123951 A1 ¶ [0004]);

defining a financial product that may be traded independent of the at least two underlying assets ("Each asset represents a single item that may be traded independently from other assets within the scope of institutional constraints." Olsen US 2002/0123951 A1 ¶ [0011]); and

determining a payoff value for the financial product wherein the payoff value is a function of the similarity of the behavior of the intermediate performances of the at least two underlying assets, each intermediate performance being related to the time period between two successive intermediate dates, ("A programmed computer for determining a portfolio, comprising at least one memory having at least one region storing computer executable program code and at least one processor for executing the program code stored in said memory, wherein the program code includes: (a) code to input past portions of one or more time series of one or more underlyings; (b) code to input one or more views about the future of said one or more time series; and (c) code to determine one or more future paths of said one or more time series from said past portions and said views." Olsen US 2002/0123951 A1 Claim 36)

Olsen US 2002/0123951 A1 fails to explicitly teach that each underlying asset is a foreign-exchange rate, an index level, an equity indices or an interest rate.

Lange 6,321,212 teaches “The distribution will typically be defined for events of economic interest for investment by traders having the expectation of a return or a reduction of risk ("hedging"). For example, the distribution can be based upon the values of stocks, bonds, futures, and foreign exchange rates.” Lange 6,321,212 col. 23 lines 44-49)”

It would have been obvious to one of ordinary skill in the art at the time of the invention to include using stocks, bonds, futures, and foreign exchange rates. as taught by Lange 6,321,212 in the system of Olsen US 2002/0123951 A1, since the claimed invention is merely a combination of old elements, and in the combination each element merely would have performed the same function as it did separately, and one of ordinary skill in the art would have recognized that the results of the combination were predictable

As per claim 10 (Original) Olsen US 2002/0123951 A1 in view of Lange 6,321,212 teaches a system according to claim 9.

Olsen US 2002/0123951 A1 fails to explicitly teach that the payoff value is value negotiated for a product traded on an over the counter (OTC) market.

Lange 6,321,212 teaches “Derivatives are traded on exchanges, such as the option and futures contracts traded on the Chicago Board of Trade (CBOT), as well as off-exchange or over-the-counter (OTC) between two or more derivative counterparties.” (Lange 6,321,212 col. 2 lines 35-38)”

It would have been obvious to one of ordinary skill in the art at the time of the invention to include negotiation for a product traded on an over the counter (OTC) market as

taught by Lange 6,321,212 in the system of Olsen US 2002/0123951 A1, since the claimed invention is merely a combination of old elements, and in the combination each element merely would have performed the same function as it did separately, and one of ordinary skill in the art would have recognized that the results of the combination were predictable

As per claim 11 (Original) Olsen US 2002/0123951 A1 in view of Lange 6,321,212 teaches a system according to claim 10.

Olsen US 2002/0123951 fails to explicitly teach that said at least one product is quoted on a futures market.

Lange 6,321,212 teaches "This is how derivatives traders currently are able to hedge options, futures, and other derivatives trades" (Lange 6,321,212 col. 18 lines 14-15)

It would have been obvious to one of ordinary skill in the art at the time of the invention to include a product quoted on a futures market. as taught by Lange 6,321,212 in the system of Olsen US 2002/0123951 A1, since the claimed invention is merely a combination of old elements, and in the combination each element merely would have performed the same function as it did separately, and one of ordinary skill in the art would have recognized that the results of the combination were predictable

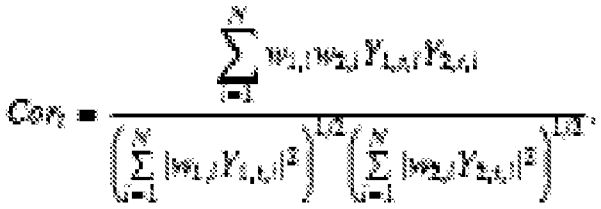
As per claim 12 (Original) Olsen US 2002/0123951 A1 in view of Lange 6,321,212 teaches a system according to claim 9.

Olsen US 2002/0123951 further discloses that computer-readable instructions stored in the memory wherein said product comprises an expiry date and wherein the payoff at the expiry date is determined by:

$$p = 100 * \left[ 1 + \frac{\sum_{i=1}^{n} p_1(i) p_2(i)}{\sqrt{\sum_{i=1}^{n} [p_1(i)]^2} \cdot \sqrt{\sum_{i=1}^{n} [p_2(i)]^2}} \right]$$

wherein n+1 is the number of said intermediate dates, the intermediate date 0 being said initiation date, $p_1(i)$ is the performance between intermediate dates i-1 and i of said first underlying asset and $p_2(i)$ is the performance between intermediate dates i-1 and i of said second underlying asset.

("In addition to a volatility model, the user can associate a model for correlation with each underlying. The available models are the same as the volatility models, i.e. historical, RMA, EMA and GARCH(1, 1). Now, however, these models are not used to define the volatility for the underlyings. Rather, they are combined pairwise to give formulas for the correlations between the underlyings. Olsen US 2002/0123951 A1 ¶ [0231]) and ("Accordingly, the correlation can be defined by



Olsen US 2002/0123951 A1 ¶ [0236])

As per claim 14, Examiner notes that the recitation “intermediate performances are monthly, weekly or daily performances” has not been given patentable weight because the intended use is not functionally related to the method steps. Thus, this nonfunctional descriptive material will not distinguish the claimed invention from the prior art in terms of patentability, see *In re Gulack*, 703 F. 2d 1381, 1385, 217 USPQ 401, 404 (Fed. Cir. 1983); *In re Lowry*, 32 F. 3d 1579, 32 USPQ 2d 1031 (Fed. Cir. 1994).

As per claim 15 (Original) Olsen US 2002/0123951 A1 in view of Lange 6,321,212 teaches a system according to claim 9.

Olsen US 2002/0123951 further discloses that the product value is determined by a Monte Carlo simulation. (“Simulation Model One embodiment of the present invention solves the portfolio re-allocation problem via Monte-Carlo simulation, which involves the construction of multivariate correlated paths into the future for each underlying time series.” Olsen US 2002/0123951 A1 ¶ [0022])

As per claim 16 (Original) Olsen US 2002/0123951 A1 in view of Lange 6,321,212 teaches a system according to claim 9.

Olsen US 2002/0123951 fails to explicitly teach that the product value is determined by a consensus mechanism.

Lange 6,321,212 teaches "Many data services, such as IBES and FirstCall, currently publish estimates by analysts and a consensus estimate in advance of quarterly earnings announcements." (Lange 6,321,212 col. 51 lines 25-27)

It would have been obvious to one of ordinary skill in the art at the time of the invention to include consensus estimates as taught by Lange 6,321,212 in the system of Olsen US 2002/0123951 A1, since the claimed invention is merely a combination of old elements, and in the combination each element merely would have performed the same function as it did separately, and one of ordinary skill in the art would have recognized that the results of the combination were predictable

As per claim 17 (Currently amended) Olsen US 2002/0123951 A1 discloses a product for correlation risk hedging comprising:

a price wherein the price is a function of an implied price correlation over a set term of at least two assets said price determined on a computing device wherein the computing devices determines the implied price correlation of said at least two assets ("A method for interacting with a computer to determine a portfolio as in claim 64 wherein said one or more simulation results comprise one or more correlations among one or more pairs of said assets." Olsen US 2002/0123951 A1 Claim 68); and

an expiry date wherein the expiry date has a term that is the same term as the set term of the implied price correlation ("If a maturity is associated with the time series, this maturity must always be relative to the present time point and not an absolute point in time." Olsen US 2002/0123951 A1, ¶ [0019]) and (The typical example is interest rates where users will see spot rates $R(t,s_j)$ for times to maturity $0 < s_1 < \ldots < s_k$ but the simulation will be on the forwards $R(t,s_j-1,s_j)$ for the periods $[t+s_{j-1},t+s_j]$, where we have put $s_0=0$. Olsen US 2002/0123951 A1, ¶ [0172]).

Olsen US 2002/0123951 A1 fails to explicitly teach that each asset is a foreign-exchange rate, an index level, an equity indices or an interest rate.

Lange 6,321,212 teaches ("The distribution will typically be defined for events of economic interest for investment by traders having the expectation of a return or a reduction of risk ("hedging"). For example, the distribution can be based upon the values of stocks, bonds, futures, and foreign exchange rates."( Lange 6,321,212 col. 23 lines 44-49)

It would have been obvious to one of ordinary skill in the art at the time of the invention to include values of stocks, bonds, futures, and foreign exchange rates as taught by Lange 6,321,212 in the system of Olsen US 2002/0123951 A1, since the claimed invention is merely a combination of old elements, and in the combination each element merely would have performed the same function as it did separately, and one of ordinary skill in the art would have recognized that the results of the combination were predictable

As per claim 18 (Original) Olsen US 2002/0123951 A1 in view of Lange 6,321,212 teaches a product according to claim 17.

Olsen US 2002/0123951 further discloses that the price is a function of an implied volatility of the at least two assets. ("A method for interacting with a computer to determine a portfolio as in claim 64 wherein said one or more simulation results comprise one or more correlations among one or more pairs of said assets." Olsen US 2002/0123951 A1 Claim 68)

As per claim 19 (Original) Olsen US 2002/0123951 A1 in view of Lange 6,321,212 teaches a product according to claim 17.

Olsen US 2002/0123951 fails to explicitly teach that the product is negotiated on an exchange.

Lange 6,321,212 teaches "Derivatives are traded on exchanges, such as the option and futures contracts traded on the Chicago Board of Trade (CBOT), as well as off-exchange or over-the-counter (OTC) between two or more derivative counterparties." (Lange 6,321,212 col. 2 lines 35-38)

It would have been obvious to one of ordinary skill in the art at the time of the invention to include negotiation on an exchange as taught by Lange 6,321,212 in the system of Olsen US 2002/0123951 A1, since the claimed invention is merely a combination of old elements, and in the combination each element merely would have performed the same function as it did separately, and one of ordinary skill in the art would have recognized that the results of the combination were predictable

As per claim 20 (Original) Olsen US 2002/0123951 A1 in view of Lange 6,321,212 teaches a product according to claim 17.

Olsen US 2002/0123951 further discloses that the price is determined according to a Monte Carlo simulation. ("Simulation Model One embodiment of the present invention solves the portfolio re-allocation problem via Monte-Carlo simulation, which involves the construction of multivariate correlated paths into the future for each underlying time series." Olsen US 2002/0123951 A1 ¶ [0022])

## *Response to Arguments*

6. In the remarks filed on 4/24/2009, Applicant argues that

**(1)** Olsen fails to describe any analysis based on market indices, or assets. Olsen's system is limited to an analysis of assets actually held in a portfolio. Applicant's invention does not use such a portfolio. Applicant uses a set of underlying assets that are a foreign-exchange rate, an index level, an equity indices or an interest rate, which intrinsically are not held assets.

**(2)** Applicant's invention, producing a product having a payoff value, which is a function of the similarity of behavior of the performances of two underlying assets that are a foreign-exchange rate, an index level, an equity indices or an interest rate.

**(3)** Lange does not cure the defects of Olsen, or teach or suggest the required elements of the rejected claims.

**(4)** For all of these reasons, above, Olsen alone or in combination with Lange fails to teach or disclose the invention recited in claims 2, 3, 6, 8-12, 14-16 and 19. Accordingly, these claims are not obvious in view of a combination of these references.

In response to applicant's argument **(1)** & **(2)**, a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim.

In response to argument **(3)** & **(4)**, Examiner has relied on Lange 6,321,212 to demonstrate the inclusion in a system of elements that would have been known to one of ordinary skill in the art at the time of the invention. It should be noted that *KSR* forecloses Applicant's arguments requiring a specific teaching, suggestion or motivation

to combine the references since the intended functions of the references have not been changed and the combination would have yielded predictable results.

***Conclusion***

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gerald C. Vizvary whose telephone number is 571-270-3268. The examiner can normally be reached on Monday thru Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ella Colbert can be reached on 571-272-6741. The fax phone number for the organization where this application or proceeding is assigned is 571-270-4268.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Ella Colbert/
Primary Examiner, Art Unit 3696

Gerald Vizvary
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